

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Previously Presented)

A substrate processing apparatus wherein a processing liquid is supplied to one major surface of a substrate and one major surface is subjected to predetermined substrate processing, comprising:

an atmosphere blocking member which is faced with other major surface of said substrate and that is away from said substrate; and

a gas supplying unit which supplies an atmosphere gas to a space which is created between said atmosphere blocking member and said substrate,

wherein a substrate-facing surface of said atmosphere blocking member which is faced with the other major surface of said substrate becomes closer to said substrate with a distance toward a periphery edge of said atmosphere blocking member, and

a central area of said substrate-facing surface which is faced with an approximately central portion of said substrate is a flat surface, and a periphery edge area of said substrate-facing surface which is faced with a periphery edge of said substrate is an angled surface which becomes closer to said substrate with a distance toward a periphery edge of said substrate-facing surface.

Claim 2 (Original)

The substrate processing apparatus of claim 1, further comprising rotation means which rotates said substrate to which said processing liquid is supplied.

Claim 3 (Original)

The substrate processing apparatus of claim 2, wherein said rotation means rotates said atmosphere blocking member together with said substrate.

Claim 4 (Original)

The substrate processing apparatus of claims 1, further comprising at least three or more

support members which are disposed at the periphery edge of said atmosphere blocking member, abut on an edge surface of said substrate and accordingly support said substrate.

Claim 5 (Original)

The substrate processing apparatus of claim 4, wherein each one of said support members comprises a contact surface which comes into a line contact with the edge surface of said substrate and supports said substrate.

Claim 6 (Original)

The substrate processing apparatus of claim 5, wherein a width of said contact surface is approximately the same as a width of a portion of said line contact.

Claim 7 (Original)

The substrate processing apparatus of claim 5, wherein a width of each one of said support members along a direction of said line contact becomes narrower with a distance away from said substrate or remains the same.

Claim 8 (Canceled)

Claim 9 (Currently Amended)

A substrate processing apparatus wherein a processing liquid is supplied to one major surface of a substrate and one major surface is subjected to predetermined substrate processing, comprising:

an atmosphere blocking member which is faced with other major surface of said substrate and that is away from said substrate; and

a gas supplying unit which supplies an atmosphere gas to a space which is created between said atmosphere blocking member and said substrate,

wherein a substrate-facing surface of said atmosphere blocking member which is faced with the other major surface of said substrate becomes closer to the other major surface of said substrate with a distance toward a periphery edge of said atmosphere blocking member, and

said atmosphere blocking member has a diameter which is ~~the same as~~ or smaller than a diameter of said substrate, and

said substrate processing apparatus further comprises three or more support members which are disposed at the periphery edge of said atmosphere blocking member, abut on an edge surface of said substrate and accordingly support said substrate.

Claim 10 (Original)

A substrate processing system, comprising: a processing unit whose structure is the same as that of the substrate processing apparatus of claims 1; and

a transportation unit which transports substrates to said processing unit.

Claim 11 (Original)

The substrate processing system of claim 10, further comprising a reversing unit which reverses substrates.

Claims 12-46 (Canceled)

Claim 47 (Previously Presented)

The substrate processing apparatus of claim 9, further comprising rotation means which rotates said substrate to which said processing liquid is supplied.

Claim 48 (Previously Presented)

The substrate processing apparatus of claim 47, wherein said rotation means rotates said atmosphere blocking member together with said substrate.

Claim 49 (Canceled)

Claim 50 (Previously Presented)

The substrate processing apparatus of claim 49, wherein each one of said support members

comprises a contact surface which comes into a line contact with the edge surface of said substrate and supports said substrate.

Claim 51 (Previously Presented)

The substrate processing apparatus of claim 50, wherein a width of said contact surface is approximately the same as a width of a portion of said line contact.

Claim 52 (Previously Presented)

The substrate processing apparatus of claim 50, wherein a width of each one of said support members along a direction of said line contact becomes narrower with a distance away from said substrate or remains the same.

Claim 53 (Previously Presented)

A substrate processing system, comprising: a processing unit whose structure is the same as that of the substrate processing apparatus of claim 9; and
a transportation unit which transports substrates to said processing unit.

Claim 54 (Previously Presented)

The substrate processing system of claim 53, further comprising a reversing unit which reverses substrates.

Claim 55 (Previously Presented)

A substrate processing apparatus wherein a processing liquid is supplied to one major surface of a substrate and one major surface is subjected to predetermined substrate processing, comprising:
a processing liquid supply nozzle which supplies said processing liquid only to one major surface of said substrate;
an atmosphere blocking member which has a shape of a disk and which is faced with other major surface of said substrate and that is away from said substrate; and
a gas supplying unit which supplies an atmosphere gas to a space which is created between

said atmosphere blocking member and said substrate,

wherein a substrate-facing surface of said atmosphere blocking member which is faced with the other major surface of said substrate becomes closer to said substrate with a distance toward a periphery edge of said atmosphere blocking member over the entire circumference of said atmosphere blocking member.